

CLAIM AMENDMENTS

Please amend the claims by adding new claims 31-35, without prejudice, as indicated on the following listing of all the claims in the present application after this Amendment:

1. (Cancelled)
2. (Previously Amended) A method of writing data into a non-volatile memory system of a type having blocks of memory cells that are simultaneously erasable and which individually store a given number of host units of data, comprising:
responding to host commands to write units of data having non-sequential logical addresses by writing data having non-sequential logical addresses into a first designated block with sequential physical addresses, and
responding to host commands to write units of data having sequential logical addresses equal to or in excess of a given proportion of said given number by writing the data into a second designated block.
3. (Previously Amended) The method of claim 2, wherein writing data to the first designated block includes writing a number of host units of data into the first designated block having sequential logical addresses less than the given proportion of said given number.
4. (Original) The method of claim 2, wherein the non-volatile memory cells are organized into multiple sub-arrays and said blocks of memory cells include memory cells of two or more of the sub-arrays.
- 5 – 25. (Cancelled)
26. (Previously Presented) The method of claim 2, wherein the given proportion is set within a range of 25-75 percent of said given number.

27. (Previously Presented) The method of claim 3, wherein the given proportion is set within a range of 25-75 percent of said given number.

28. (Previously Presented) A method of writing data into a non-volatile memory system of a type having blocks of memory cells that are simultaneously erasable and which individually store a given number of host units of data, comprising:

responding to host commands to write units of data having a number of sequential logical addresses less than a fraction of said given number by writing the data into a first designated block, and

responding to host commands to write units of data having a number of sequential logical addresses equal to or in excess of the fraction of said given number by writing the data into a second designated block.

29. (Previously Presented) The method of claim 28, wherein the non-volatile memory cells are organized into multiple sub-arrays and said blocks of memory cells include memory cells of two or more of the sub-arrays.

30. (Previously Presented) The method of claim 28, wherein the fraction is set within a range of 25-75 percent of said given number.

31. (New) A method of operating a non-volatile memory system in response to commands received from a host to individually write logically addressed units of data therein, the memory system having memory cells grouped into blocks that are simultaneously erasable and which individually store a given number of units of data at individual physical addresses, the logical addresses of received units of data being mapped within the memory system into corresponding physical addresses where the received units of data are stored, comprising:

allocating a first one of the blocks to store units of data having a number of sequential logical addresses less than a fraction of said given number,

allocating a second one of the blocks to store units of data having a number of sequential logical addresses equal to or in excess of the fraction of said given number,

in response to receipt of a command to write data having a number of sequential logical addresses less than said fraction, determining whether the first block has sufficient erased capacity to store the received data and, if so, writing the received data into sequential physical addresses of the first block, and

in response to receipt of a command to write data having a number of sequential logical addresses equal to or in excess of said fraction, determining whether the second block has erased capacity to store the data and, if so, writing the data into sequential physical addresses of the second block.

32. (New) The method of claim 31, additionally comprising:

in response to receipt of the command to write data having a number of sequential logical addresses less than said fraction, if the first block does not have sufficient erased capacity to store the received data, allocating a third one of the blocks to store units of data having a number of sequential logical addresses less than a fraction of said given number and then writing the received data into sequential physical addresses of the third block, and

in response to receipt of the command to write data having a number of sequential logical addresses equal to or in excess of said fraction, if the second block does not have sufficient erased capacity to store the received data, allocating a fourth one of the blocks to store units of data having a number of sequential logical addresses equal to or in excess of the fraction of said given number and then writing the received data into sequential physical addresses of the fourth block.

33. (New) The method of claim 32, wherein the fraction is set to be within a range of 25-75 percent of said given number.

34. (New) The method of claim 31, wherein the non-volatile memory cells are organized into multiple sub-arrays and said blocks of memory cells include memory cells of two or more of the sub-arrays.

35. (New) The method of claim 31, wherein the fraction is set to be within a range of 25-75 percent of said given number.